

PROGRAM

Monday 14 th			Length
08:00 - 08:45	Registration		0:45
08:45 - 09:15	Opening session		0:30
09:15 - 10:15	Keynote speech (Richard Marshall, Xitex)		1:00
Session chair:	Ilia Polian		
10:15 - 11:10	Posters I (coffee break)		0:55
Topic: PUFs and TRNGs			
Paper #			
14	Ugo Mureddu , Lilian Bossuet and Viktor Fischer	A comparison of PUF cores suitable for FPGA devices	
15	UNDISCLOSED		
28	Thomas Sarno, Romain Wacquez, Philippe Maurine, Khalil Jradi, Jean-Michel Portal, Driss Aboulkassimi, Sarra Souiki-Figuigui, Jérémy Postel-Pellerin, Pierre Canet, Maxime Chambonneau and David Grojo	Electromagnetic Analysis Perturbation using Chaos Generator	
30	Honorio Martin , Giorgio Di Natale and Pedro Peris-Lopez	Poster: A Self-Repairable TRNG	
31	Yoav Weizman , Batya Karp and Osnat Keren	Modeling SRAM cell stability for randomness evaluation of PUF cells	
42	Linus Feiten , Matthias Sauer and Bernd Becker	Using LUT-specific delays to mitigate biases in delay-based PUFs and increase area efficiency on FPGAs	
48	UNDISCLOSED		
11:10 - 12:30	Session I		1:20
Session chair:	Daniel Arumi		
Topic: STSM presentations			
Paper #			
STSM-1	Ke Jiang	Real-Time Scheduling as a Countermeasure Against DPA	
STSM-2	Maria Méndez Real	Investigation on Spatial Isolation against Logical Cache-based Side-Channel Attacks in Multi/Many-Core Architectures	
STSM-3	Tania Richmond	DPA Aiming the Secret Permutation in the McEliece Cryptosystem	
STSM-4	Airo Farulla Giuseppe	Model Driven Design of Secure Properties for Vision-Based Applications	
12:30 - 14:30	Lunch		2:00

14:30 - 16:10		Session II	1:40
Session chair:		Nele Mentens	
Topic: PUFs and TRNGs			
Paper #			
5	Oto Petura , Ugo Mureddu, Nathalie Bochard, Lilian Bossuet and Viktor Fischer	Evaluation of AIS-20/31 compliant TRNG cores implemented on FPGAs	
12	Raimondo Luzzi , Marco Bucci, Christoph Böhm and Maximilian Hofer	A Reliable Low-area Low-power PUF-based Key Generator	
20	UNDISCLOSED		
41	Christine Utz , Johannes Tobisch and Georg T. Becker	Extended Abstract: Analysis of 1000 Arbiter PUF based RFID Tags	
57	UNDISCLOSED		
16:10 - 17:30		Posters II (coffee break)	1:20
Topic: Validation and Evaluation / Detection of malicious components			
Paper #			
11	Erica Tena-Sánchez , Salvador Canas, Irene Duran and Antonio Acosta	Vulnerability Evaluation and Secure Design Methodology of Cryptohardware for ASIC-embedded Secure Applications to Prevent Side-Channel Attacks	
36	Mosabbah Mushir Ahmed , David Hely, Etienne Perret and Romain Siragusa	Authentication of IC based on Electromagnetic Signature	
44	UNDISCLOSED		
54	Laurent Sauvage , Youssef Souissi and Sofiane Takarabt	Secure Silicon: Towards Virtual Prototyping	
60	UNDISCLOSED		
29	Jelena Milosevic and Nicolas Sklavos	Malware in IoT Hardware Devices	
17:30 - 20:00		Welcome reception	2:30

Tuesday 15 th			Length
08:00 - 09:40 Session III Session chair: Salvador Manich Topic: Validation and Evaluation			1:40
Paper #			
25	Pascal Sasdrich , Amir Moradi and Tim Güneysu	Hiding Higher-Order Side-Channel Leakage - Randomizing Threshold Implementations in Reconfigurable Hardware	
40	Florian Wilde , Berndt Gammel and Michael Pehl	Spatial Correlations in Physical Unclonable Functions	
51	Viacheslav Izosimov and Martin Törnngren	Security Evaluation of Cyber-Physical Systems in Society-Critical Internet of Things	
59	Natalia Mendo , Rubén Nuevo and David Hernandez	Experimental results on smartcards' IC EM radiation	
39	Michael Weiner and Salvador Manich	The SALVADOR simulation framework	
09:40 - 10:50 Posters III (coffee break) Topic: Fault attack injection, detection and protection / Reconfigurable devices for secure functions			1:10
Paper #			
10	Francisco Eugenio Potestad-Ordóñez , Carlos Jesus Jiménez-Fernández and Manuel Valencia-Barrero	Fault Injection on FPGA implementations of Trivium Stream Cipher using Clock Attacks	
13	UNDISCLOSED		
22	Apostolos Fournaris , Louiza Papachristodoulou , Lejla Batina and Nicolas Sklavos	Secure and Efficient RNS Approach for Elliptic Curve Cryptography	
46	UNDISCLOSED		
50	Shlomo Engelberg and Osnat Keren	Trustworthy Communications across Parallel Asynchronous Channels with Glitches	
21	Madin Neagu and Salvador Manich	Random masking interleaved scrambling technique as a countermeasure for DPA/DEMA attacks in cache memories	
45	Vojtech Miškovský , Hana Kubatova and Martin Novotny	Influence of Fault-tolerant Design Methods on Resistance against Differential Power Analysis in FPGA	
52	UNDISCLOSED		
56	UNDISCLOSED		
61	Ofer Hadar , Rami Segal and Raz Birman	H.264 Motion Vectors Based Cyber Defense/Attack Techniques	

10:50 - 12:30		Session IV	1:40
Session chair:		Michael Pehl	
Topic: Fault attack injection, detection and protection			
Paper #			
7	Jan Burchard, Maël Gay , Jan Horáček, Ange-Salomé Messeng Ekosso, Tobias Schubert, Bernd Becker, Ilia Polian andMartin Kreuzer	Small Scale AES Toolbox: Algebraic and Propositional Formulas, Circuit-Implementations and Fault Equations	
17	Baris Ege , Pedro Maat Massolino and Lejla Batina	Smart Card Fault Injections with High Temperatures	
24	Juvenal Araujo , Pedro Matutino and Ricardo Chaves	Residue Number System Hardware Emulator and Instructions Generator	
34	UNDISCLOSED		
53	UNDISCLOSED		
12:30 - 14:30		Lunch	2:00
14:30 - 20:50		Cultural visit and dinner	6:20

Wednesday 16 th			Length
08:00 - 09:00	Invited speaker (Michael Pehl, EISEC - TUM)		1:00
Session chair:	Rosa Rodriguez		
09:00 - 10:20	Session V		1:20
Session chair:	Ioana Vatajelu		
Topic: Reconfigurable devices for secure functions			
Paper #			
16	Johanna Sepulveda , Ramon Fernandes, Cesar Marcon and Georg Sigl	Dynamic Security-aware Routing for Zone-based data Protection in Multi-Processor System-on-Chips	
19	Matej Bartik and Jiri Bucek	A Low-Cost Unified Experimental FPGA Board for Cryptography Applications	
26	Jori Winderickx , Joan Daemen and Nele Mentens	On the parallelization of slice-based Keccak implementations on Xilinx FPGAs	
35	Nicolas Sklavos , Paris Kitsos and Artemios G. Voyiatzis	On the Hardware Implementation Efficiency of CAESAR Authentication Ciphers for FPGA Devices	
10:20 - 11:10	Posters IV (coffee break)		0:50
Topic: Manufacturing test of secure devices / Reverse engineering countermeasures / Other topics			
Paper #			
6	Marek Laban , Miloš Drutarovský , Viktor Fischer and Michal Varchola	Platform for testing and evaluation of PUFs and TRNGs implemented in FPGAs	
9	UNDISCLOSED		
33	UNDISCLOSED		
18	UNDISCLOSED		
27	Moshe Avital , Alexander Fish and Osnat Keren	From Full-Custom to Fully-Standard Cell Power Analysis Countermeasures	
8	Jo Vliegen , Bob Koninckx, Dave Singelée and Nele Mentens	Real-time encryption and authentication of medical video streams on FPGA	
43	UNDISCLOSED		
58	Stjepan Picek , Annelie Heuser, Sylvain Guilley, Domagoj Jakobovic and Nele Mentens	On the Machine Learning Techniques for Side-channel Analysis	
11:10 - 12:30	Session VI		1:20
Session chair:	Carles Ferrer		
Topic: Manufacturing test of secure devices / Reverse engineering countermeasures / Hardware Trojans in IPs and ICs			
Paper #			
49	Hermann Seuschek , Fabrizio De Santis and Oscar Guillen	Side-Channel Leakage Models for IoT Processors	
23	Arash Nejat , David Hely and Vincent Beroulle	Reusing Logic Masking to Facilitate Hardware Trojan Detection	
38	Johanna Baehr and Michael Tempelmeier	Circuit Clustering Methods for Netlist Reverse Engineering	
55	Francesco Regazzoni , Georg T Becker and Ilia Polian	Trojans in Early Design Steps - An Emerging Threat	
12:30 - 14:30	Lunch		2:00
14:30 - 14:50	Closing session		0:20
14:50 - 15:10	MC Meeting Session		0:20
15:10 - 17:10	Open meeting follow up for other projects in future		2:00